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01 QMR OF THE MONTH

We are pleased to announce this month's winner of the QMR of the Month.

Shaun Witmer

Apple Subaru in York, PA

Shaun submitted a very detailed QMR reviewing his diagnosis of a 2013 Outback with an unusual parasitic draw. Shaun successfully split-halved the system and was able to determine the source of the draw was from the driver's power seat memory control module staying awake, but he didn't stop there. Further testing led to him finding a short to ground on the seat frame that simulated the signals from the setting buttons which prevented the module from entering its sleep mode. This resulted in a wiring repair for the seat harness. This kind of detailed insight to the thought processes applied during the diagnosis was very helpful to us from several perspectives. In this case, it resulted in reviews of the service information supplied, technical training, and of course quality improvements based upon finding the root cause of the condition. This demonstrates once again that individual reports can have significant impact so, keep them coming!

In appreciation for going the extra mile and sharing his experience with us, Shaun will be receiving the following from his FSE:

**A Subaru Confidence In Motion Jacket
and a \$100 Gift Card**

Any Subaru Service Technician can participate in QMR of the Month. See the February 2013 Tech Tips for full details. You may see your name here in a future Tech Tips.

Be a part of the solution on April 22, 2014 and

Help Out This Earth Day!

Find Local Events in your Community at www.earthday.org



CAUTION: VEHICLE SERVICING PERFORMED BY UNTRAINED PERSONS COULD RESULT IN SERIOUS INJURY TO THOSE PERSONS OR TO OTHERS.

The Subaru TechTIPS newsletter is intended for use by professional technicians ONLY. Articles are written to inform those technicians of conditions that may occur in some vehicles, or to provide information that could assist in the proper servicing of the vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do the job correctly and safely. If a condition is described, DO NOT assume that your vehicle has or will have that condition. Impreza, Legacy, Justy, Loyale, Outback, Forester, Subaru SVX, WRX, WRX STI, L.L. Bean, Baja, Tribeca, BRZ, XV Crosstrek and "Quality Driven" are Registered Trademarks.

SUBARU OF AMERICA, INC. IS "ISO 14001 COMPLIANT"

The international standard for excellence in Environmental Management Systems. Please recycle or dispose of automotive products in a manner that is friendly to our environment and in accordance with all local, state and federal laws and regulations.



QUALITY DRIVEN® SERVICE



01 NEW TECHLINE PRE-CALL WORKSHEETS

New Techline Pre-Call Worksheets have been created and posted on [Subarunet.com/Service/Pre-Call Worksheets](http://Subarunet.com/Service/Pre-Call-Worksheets). These worksheets have been structured to provide technicians with an organized format to record results of basic system diagnostic checks and other relevant information during an investigation to help identify a root cause for concern. Use of these new forms is strongly encouraged and may ultimately expose specific areas of investigation that might otherwise be overlooked.

In the event additional technical assistance is needed, complete a “Dealer Request for Technical Assistance” form and submit it along with the specific system worksheet. Contact Techline and have a case created. Inform the representative that you have completed the worksheets and would like to send them in for review. Once received, they can be used to analyze your complete and accurate results to better provide you with the best possible next step recommendation. This information can also be accessed by field staff through an existing Techline case for further assistance when needed.

*****In order to effectively manage incoming correspondence, worksheets should not be forwarded to the Techline without an accompanying case number*****

16 COLD WEATHER CVT OPERATION, ENGINE RPM, AND CABIN HEAT

Starting with 2010 Legacy and Outback CVT and continuing with each subsequent new model release (2012 Impreza 2.0, 2014 Forester, etc...), FHI incorporated logic into the TCM for it to consider the driver's request for heat as a factor in determining where to set the CVT turbine speed. The HVAC head unit supplies information through the CAN on the driver's request for heat based upon a combination of blower fan operation and temperature (blend door) settings. The TCM logic then translates these into a High heat request, a Low heat request, or No heat request. Depending upon the level of the request, the TCM then instructs the CVT to change the drive ratio to create a net increase in turbine speed (engine rpm) so that additional heat is supplied to the passenger cabin. As a result you may hear comments or concerns from customers during periods of cold weather. This is particularly true during extreme or long lasting cold weather events. These may include comments ranging from customers noting that the engine rpms seems to be staying higher, to the CVT not entering its regular final drive ratio, to a concern that the CVT is hesitating (again not advancing to its regular final drive ratio). In each of these cases a detailed interview and review of the customer concern found that the symptom the customer observed was that the engine rpms were higher than the customer had seen previously (during warmer weather). The reason in each case was simply cold weather prompting an increased demand for cabin heat by the driver which resulted in the engine rpms being kept high to provide that heat. This was easily verified during similar cold conditions by turning the blower fan to the OFF position for several seconds while cruising at a steady speed in a fully warmed car and watching the resultant drop in rpms. If a customer reports a concern with higher rpm operation as a result of this logic and wants to reverse that effect, recommend that they reduce the temperature setting (or turn the blower fan to OFF) until it has the desired effect on engine rpm. Either of these actions will reduce or eliminate the input to the TCM that results the rpm increase. Otherwise simply explain that this is characteristic operation of the engine and transmission during cold weather resulting from the vehicle trying to meeting the driver's request for more heat based upon the HVAC temperature and blower settings.

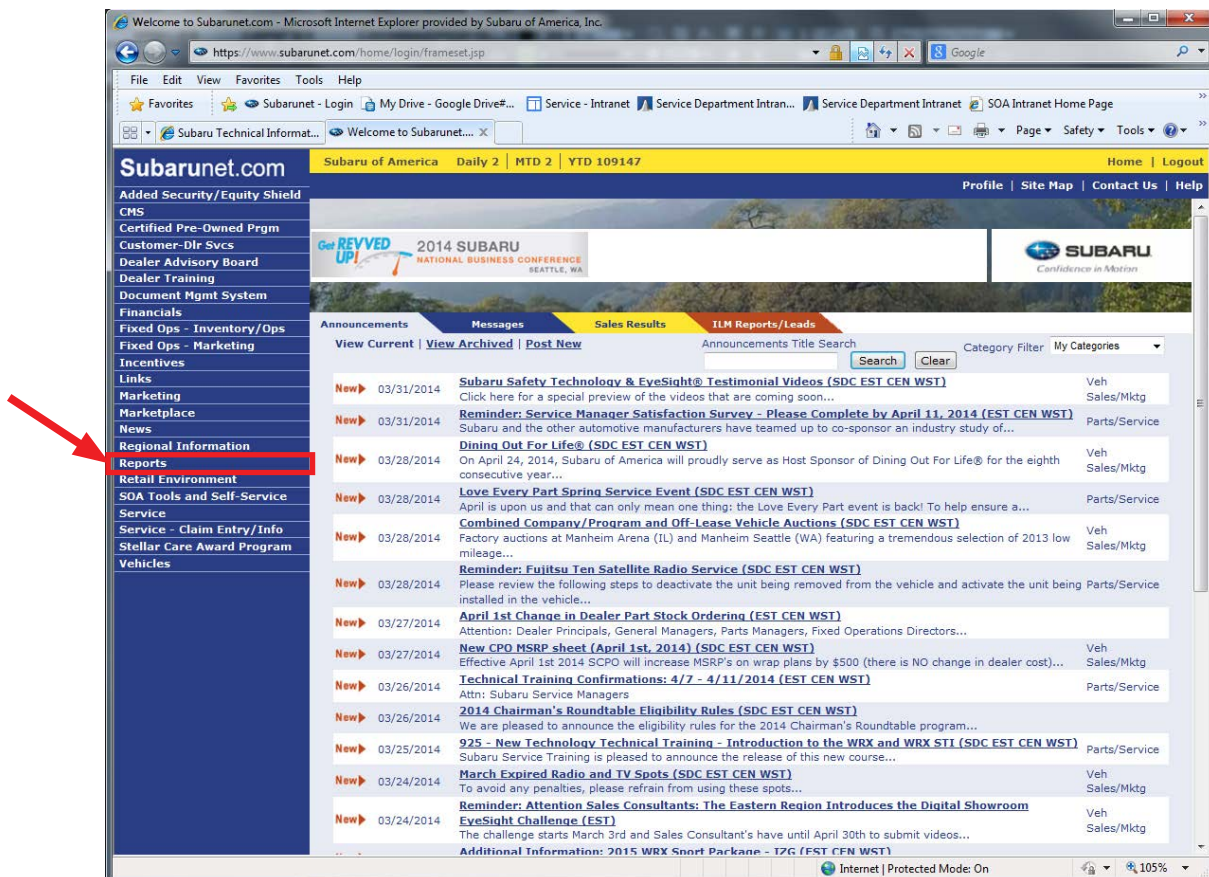
We would like to remind you of the importance of following up with us to update and close open Techline cases. To those of you who work hard to keep your number of open cases minimized, we thank you and truly appreciate your efforts. The information provided back to us has been invaluable and in some cases, your results have helped Techline assist others with similar conditions. We understand that everyone is busy and time spent on the phone cuts into your productivity. However, keeping the lines of communication open and information flowing is essential and beneficial to all parties involved. In an effort for us to assist you, please keep these points in mind when you contact the Techline:

- Always get the name of the Techline Representative that you speak with.
- Get a Case Number.
- Follow-Up with the Techline Representative about your findings.

To close a case when the issue is resolved, we ask that you contact the Techline or use option #8 “To Close a case” on the phone system during our business hours to advise us of the repair that fixed the condition. Our normal hours of operation are: Monday thru Thursday 8:30 AM- 7:30PM, Friday from 10:30 AM to 5:00 PM and on Saturdays from 9:00 AM to 3:00 PM Eastern Time.

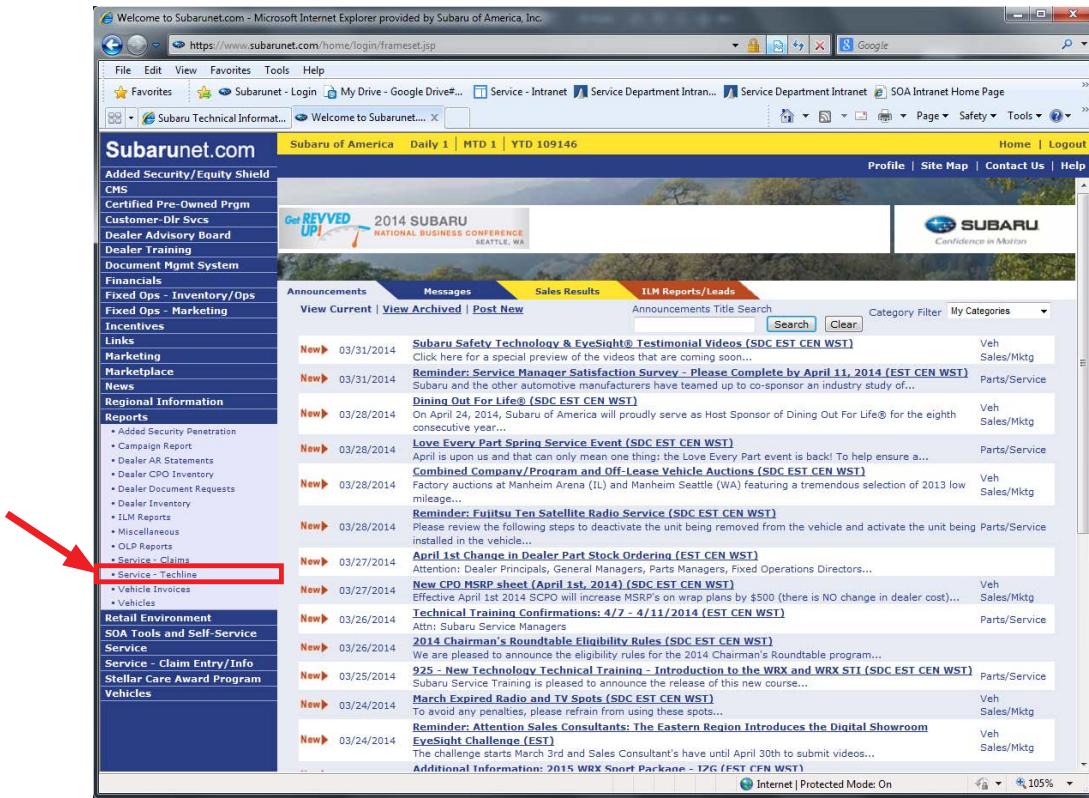
Not sure if you have any open or pending cases?

There is a report you can run to check if your Dealership has any open or pending cases. Simply log onto Subaru-net, then on the left side of the webpage is a navigation bar. Click on the “Reports” link.

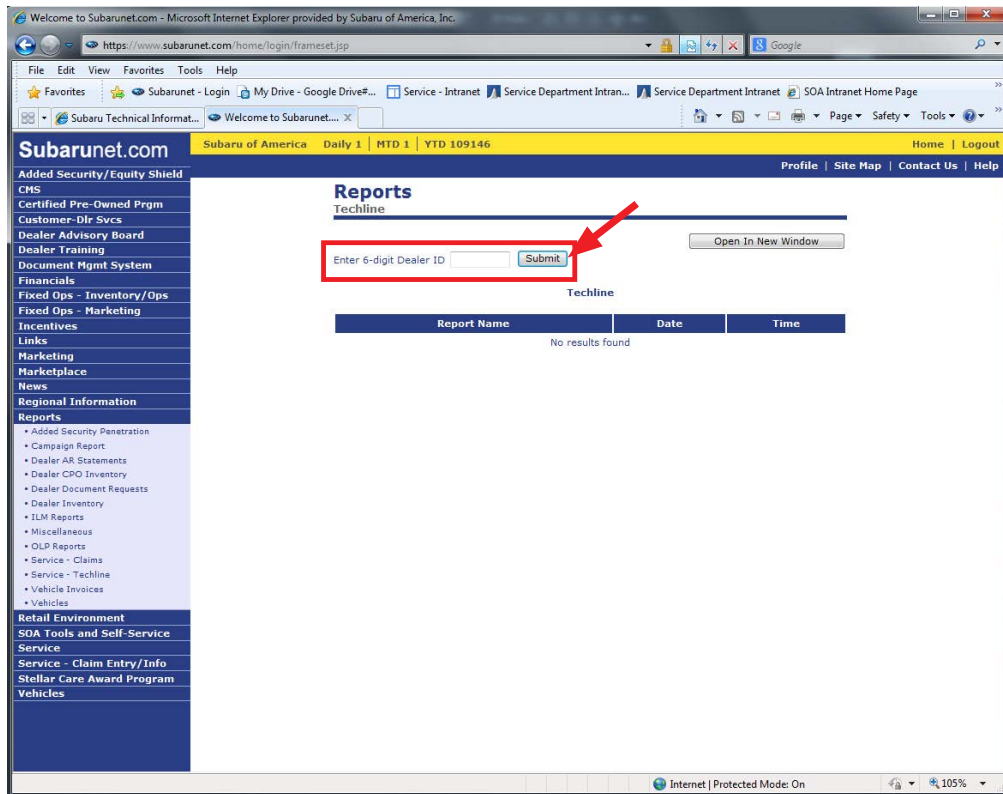


01 TECHLINE CASE FOLLOW UP- REVISED (CONTINUED)

Then click on "Service - Techline".



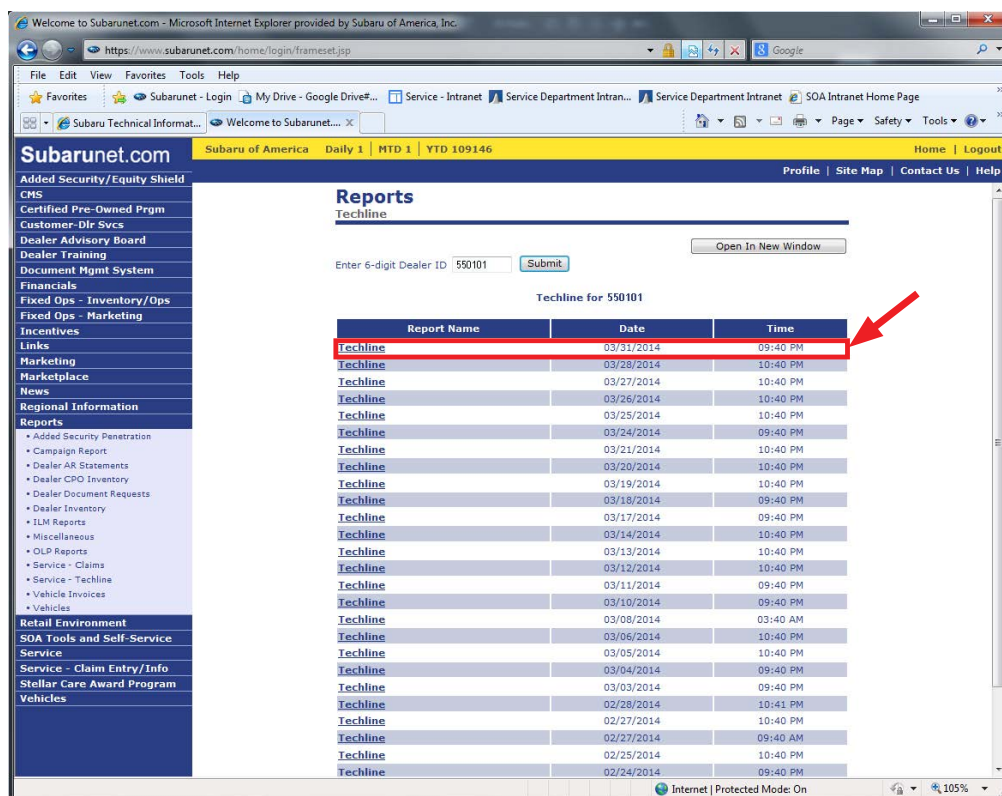
Enter your dealer code then click "Submit".



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01 TECHLINE CASE FOLLOW UP - REVISED (CONTINUED)

A list of dates will be displayed. Click on the most recent date to view your “Pending Dealer Update” cases.



The screenshot shows the Subaruunet.com interface. The main content area is titled "Reports" and "Techline". Below the title, there is a search field for "Enter 6-digit Dealer ID" with the value "550101" and a "Submit" button. A table titled "Techline for 550101" displays a list of reports. The table has three columns: "Report Name", "Date", and "Time". The most recent report, dated 03/31/2014 at 09:40 PM, is highlighted with a red box and a red arrow pointing to it.

Report Name	Date	Time
Techline	03/31/2014	09:40 PM
Techline	03/28/2014	10:40 PM
Techline	03/27/2014	10:40 PM
Techline	03/26/2014	10:40 PM
Techline	03/25/2014	10:40 PM
Techline	03/24/2014	09:40 PM
Techline	03/21/2014	10:40 PM
Techline	03/20/2014	10:40 PM
Techline	03/19/2014	10:40 PM
Techline	03/18/2014	09:40 PM
Techline	03/17/2014	09:40 PM
Techline	03/14/2014	10:40 PM
Techline	03/13/2014	10:40 PM
Techline	03/12/2014	10:40 PM
Techline	03/11/2014	09:40 PM
Techline	03/10/2014	09:40 PM
Techline	03/08/2014	03:40 AM
Techline	03/06/2014	10:40 PM
Techline	03/05/2014	10:40 PM
Techline	03/04/2014	09:40 PM
Techline	03/03/2014	09:40 PM
Techline	02/28/2014	10:41 PM
Techline	02/27/2014	10:40 PM
Techline	02/27/2014	09:40 AM
Techline	02/25/2014	10:40 PM
Techline	02/24/2014	09:40 PM

12 2014 FORESTER POWER REAR TAILGATE

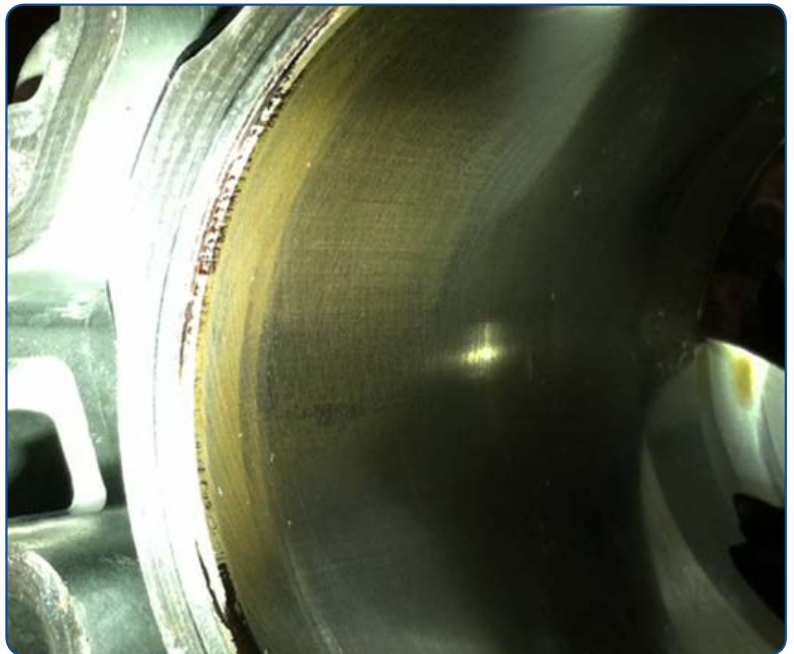
Should you receive a customer complaint of the power rear tailgate not working properly and you have checked the system for Diagnostic Trouble Codes and found a DTC B250F (Rotation Sensor Failure), make sure the rear gate stays are not bent at the attachment bracket as shown in this photo to the right. If this condition is confirmed, the gate stay will need to be replaced. Do not attempt to repair the bent bracket.



02 DISCOLORATION OF CYLINDER WALLS

The SOA Techline and Quality Assurance sections of the Service Department have recently had inquiries regarding cylinder wall discoloration noticed during installation of the updated piston rings.

In some cases, the Technician also reports measurements are out of specification when measuring the cylinder bore. It is required per the Service Manual that the cylinder bore must be checked at 68 degrees Fahrenheit, otherwise some variations are normal. The photo to the right is an example of this discoloration. It is in no way harmful to install the updated piston rings and use the existing block.



All of the Oil Control Ring TSBs have been recently updated on STIS with additional helpful information based upon field feedback, please make sure to review all of the enhancements. We frequently encourage all technicians to download the very latest Service Bulletin from STIS before performing it to ensure they have the latest information available.

01 AUTHORIZATION REQUEST PICTURES

As mentioned in the February TIPS, the importance of taking quality pictures is essential when submitting an Authorization Request (AR) for consideration. Subarunet allows for each picture to be up to 5MB which is possible only when using a quality camera. Certain cell phones have the capability of providing quality pictures however, they must be saved in the proper format, **Actual Size**.

Prior to the customer leaving your dealership, take a minute to review the pictures you are about to submit to ensure their quality.

A camera is the best tool to use when taking pictures to attach to an AR. However, if you are sending pictures taken by a cell phone, it is recommended to choose the **Actual Size** when prompted. This will provide the best quality photo possible. The quality of the Small (KB), Medium (KB) or Large (KB) size pictures in most cases have poor resolution. This makes it necessary for us to request additional pictures.

Always review your pictures prior to attaching them to your AR request.

02-150-14R; Technical Service Bulletin, Revised Valve Train Parts to Reduce a Warm Engine Tapping Sound from the Left Cylinder Head

12-166-14; Technical Service Bulletin, Revised L/Front Dash Speaker Grille

07-84-14; Technical Service Bulletin, Revised B1650 Diagnostics and ODS Rezeroing Procedure

MSA5M1424A; Owner Manual, 2014 XV Crosstrek Hybrid Owner's Manual

11-136-14; Technical Service Bulletin, Reprogramming File Availability for Idle Stability and Extended Engine Cranking

12-168-14; Technical Service Bulletin, Appearance Imperfection of Inside Rear View Mirror

2014 Calendar of Subaru Holidays

Memorial Day

Monday, May 26, 2014

Independence Day

Friday, July 4, 2014

Labor Day

Monday, September 1, 2014

Thanksgiving

Thursday, November 27, 2014

Friday, November 28, 2014

Happy Holidays

Thursday, December 25, 2014

Friday, December 26, 2014

*** NOW YOU CAN E-MAIL YOUR TECHTIPS INPUT AND SUGGESTIONS TO: TECH@SUBARU.COM ***

This is your chance to offer suggestions for use in future issues of TechTIPS! Make sure that if you e-mail us, you place in the **subject line** of your e-mail "**For TechTIPS Newsletter**". Thank you!

MODEL: _____

YEAR: _____

VIN: _____

Description of situation encountered: _____

Your suggestion for repair procedure, product improvements, etc.: _____

Please attach separate sheets, if necessary. You may also want to include Service Manual diagrams or references, or your own drawings to assist in describing your suggestion. All information submitted becomes the property of Subaru of America, Inc. Permission is granted to Subaru of America, Inc. to print your name and suggestions in TechTIPS and other Subaru of America, Inc. publications. Mail items to: PO Box 6000, Cherry Hill, NJ 08034-6000.

Your Name: _____ Signature: _____

Dealer's Name: _____ City: _____

Date: _____ Dealer Code: _____

SUBARU TECHLINE
Hours of Operation

Monday – Thursday 8:30 am to 7:30 pm
Friday 10:30 am to 5 pm and Saturday 9 am to 3 pm